DOCUMENT RESUME

ED 481 867 HE 036 298

TITLE	Anytime, Anyplace Services for the 21st Century Student. A Report and Recommendations in a Series on Distance Learning Policy Issues.
INSTITUTION	Southern Regional Education Board, Atlanta, GA.
SPONS AGENCY	Fund for the Improvement of Postsecondary Education (ED), Washington, DC.
PUB DATE	2002-06-00
NOTE	45p.; A Report by the Distance Learning Policy Laboratory Student Services Subcommittee. Support also provided by Stranahan Foundation. For other papers in the distance education series, see HE 036 295-296 and HE 036 299.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01/PC02 Plus Postage.
DESCRIPTORS	*Delivery Systems; *Distance Education; *Higher Education; *Online Systems
IDENTIFIERS	*Student Support Services

ABSTRACT

Colleges and universities have moved to develop online courses that are independent of time and place, but equal effort and financial commitment have not been given to the development or licensing of support services that accompany these courses. Services should be available at the same times that academic courses are, yet few institutions provide a full array of academic and administrative services that can be accessed at any time from any place. Evidence is also mounting that services designed to serve distance learners also better serve students who live on or near campus. Institutions must move towards a model in which services are designed around the needs of the student, not the institution. A variety of services, such as business office functions, bookstore purchases, financial aid, admission, registration, library, advising, career counseling, and testing need to be modified for learners whose work schedules or physical distance impede them from traveling to campus. The growing use of technology requires new student services. In addition, the distance learning environment may be associated with unique learner needs that demand the development of new services. (SLD)

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Distance Learning Policy Laboratory

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Anytime, Anyplace Services for the 21st Century Student

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Anytime, Anyplace Services for the 21st Century Student

June, 2002

A report by the Distance Learning Policy Laboratory
Student Services Subcommittee

A Report and Recommendations in a Series on
Distance Learning Policy Issues

About the Southern Regional Education Board Distance Learning Policy Laboratory

At its June, 1999, meeting, the Southern Regional Education Board approved the establishment of the SREB Distance Learning Policy Laboratory. Building upon the work of the Educational Technology Cooperative and the *Electronic Campus*, the Policy Laboratory seeks to reduce or eliminate existing or potential policy barriers to distance learning activities in three broad areas: ***access, quality,*** and ***cost***. The Policy Laboratory's main objectives are:

- Assessing educational policy issues that are identified as barriers;
- Establishing policy baselines of current practices, procedures and strategies;
- Assisting states and institutions as they develop ways to use technology to improve quality, expand access, and reduce costs;
- Establishing trial or pilot efforts with State Partners to test new distance learning approaches or strategies;
- Promoting state-level policy changes via existing SREB organizational arrangements and agreements;
- Developing and testing agreements among institutions and states;
- Utilizing the regional platform to serve as a clearinghouse for states and institutions to discuss policy issues and concerns; and
- Measuring the implementation of policy changes in the SREB states and widely disseminating the results.

The SREB Distance Learning Policy Laboratory is supported in part by a grant from the United States Department of Education Fund for the Improvement of Postsecondary Education's (FIPSE) Learning Anytime, Anywhere Partnerships (LAAP) program. The contents of this report were developed under the grant but do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government. Additional support has been provided by a grant from the Stranahan Foundation of Toledo, Ohio.

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The Distance Learning Policy Laboratory Student Services Subcommittee

Joe Barden, Virginia Community College System
Barbara Blaney, University of South Carolina
Diane Chubb, Georgia Global Learning Online for Business and Education
Robbie K. Melton, Tennessee Board of Regents
Kate Nevins, SOLINET
Sue Pace, University of Southern Mississippi
Miko Patti, Kentucky Virtual University Library
Mary Pritchard, University of Delaware Online
Jason Pugh, Mississippi State Board for Community and Junior Colleges
Pam Quinn, Dallas County Community College District
Susan Smith, The University of Texas Telecampus
Bob Swisher, University of Oklahoma
Pat Torvestad, University of Arkansas System
Karen Yerby, North Carolina Community College System

Bruce Flack, Subcommittee Co-Chair, West Virginia Higher Education Policy Commission
Susie Henderson, Subcommittee Co-Chair, Florida Community College Distance Learning Consortium

Alice Anne Bailey, SREB Distance Learning Policy Laboratory
Bruce Chaloux, SREB Distance Learning Policy Laboratory

Table of Contents

Executive Summary i

Introduction 1

Meeting Student Needs 3

- Customer Relationship Management 3
- Services for All Students 6
- Distance Learning Student Needs and Attitudes 8

Delivery of High-Quality, Just-in-Time Services for Distance Learners 11

- Realistic Recruitment of Prospective Students 11
- Orientation Programs 14
- Student Mentors 16
- Creating a Distance Learning Community 19
- Unbundling and Fee Packaging 20
- Outsourcing 21
- Collaborative Approaches 26

Concluding Comments 32

Tables and Appendices

- Appendix A 35
- Appendix B 36

Executive Summary

Student services play a direct, critical role in student success, including students' academic performance, psychological growth, and program or certificate completion. While colleges and universities have moved rapidly in the past decade to develop online courses, even complete degree programs that are independent of time and place, equal effort and financial commitment have not been given to the development or licensing of support services that accompany those courses. Services should be available at the same times that academic courses are, yet very few institutions provide a full array of academic and administrative services that can be accessed at anytime from anyplace.

Furthermore, evidence is mounting that services designed to serve distance learners also better serve students who live on or near the campus. Institutions must move towards a model in which services are designed around the needs of the student, not the institution. Institutions that can provide quality, convenient services that are available at all times and in alternative formats are more likely to distinguish themselves from their peers and to grow their enrollments.

Therefore, a variety of traditional campus-based services, such as business office functions (including tuition, fee, and other payments), bookstore purchases, financial aid, admission, registration, library, advising, career counseling, and testing need to be modified for learners whose work schedules or physical distance impede them from traveling to campus. The growing use of technology in both on-and-off campus education demands new student services (such as technology training) as well as new delivery formats (such as the Internet) for all students.

In addition, the distance learning environment may be associated with unique learner needs that demand the development of new services. Findings from the Policy Laboratory survey show that students typically report a higher satisfaction with the active, self-directed learning required by distance courses. However, some students are unprepared for the amount of self-discipline required or have unrealistic expectations as to the time, effort, and skills necessary to succeed. Distance learning is not appropriate for all students and learning styles. Because distance learning places a greater responsibility for learning on the student, it may require specialized services to support the learning process.

Principles and Recommendations

The Distance Learning Policy Laboratory has adopted four guiding principles surrounding Student Services for distance learners:

- The distance learning environment, which places a greater responsibility for learning on the student, requires specialized services to support the learning process.
- The provision of online, flexible services benefits both on- and off-campus students, as well as institutional efficiency.
- Collaboration pools resources, saves costs, and reduces duplication to provide a greater depth and breadth of services. Collaboration on both state and regional levels can achieve economies of scale that no single institution could maintain alone.
- A learner-centered Customer Relationship Management model is fundamental to ensuring that instructional activities and support services truly meet student needs.

Within these guiding principles, the Student Services subcommittee offers the following recommendations for consideration by the Distance Learning Policy Laboratory Leadership Group, SREB, and institutions in its member states.

1. Institutions should ensure that all students have comparable and adequate access to needed services whether they are traditional, non-degree, part-time, distance, disabled, or "home" students of the institution.

2. Institutions should develop and provide realistic previews of the distance learning experience for potential students during the recruitment process.

3. Institutions should provide orientation for all distance learners that adequately prepares them to use technology, manage their time, and regulate their learning. Orientation should inform students about all institutional policies and available student services.

4. Institutions should develop a mentor program for distance learning to motivate students, model appropriate behavior, tutor academic needs, and provide academic advising/support.

5. Institutions should work to develop a learning community through a centralized Web portal designed specifically for distance learning students.

6. Institutional leaders should be encouraged to develop new and innovative funding models, such as unbundling and fee packaging, to meet varying student needs.

7. Institutions should consider outsourcing services to other institutions, consortia, or outside vendors to provide services where appropriate. Partnerships with third-party providers may be very beneficial in terms of financial savings realized by the institution, as well as in the breadth and quality of services available to students.

8. Multiple institutions should seek to collaborate with one another, in consortial or similar arrangements, to offer services and achieve economies of scale wherever possible.

9. The *Electronic Campus* should develop greater capacity within its Web site to provide students with robust evaluative tools for comparing courses, programs, and institutional requirements.

10. SREB is encouraged to pursue its efforts to establish a regional "learning network" of support services to provide increased levels of service for students as well as financial benefits to states and institutions. The regional "gateway" should focus on those services that provide advantages that a single institution or state could not achieve on its own while "leveling the playing field" by sharing resources across the region.

11. SREB and its member states should work with the Southeastern Library Network (SOLINET) to assess the feasibility of creating a virtual regional library network that would link the various state library initiatives together through a common Web portal.

Introduction

There is little debate that student services play a direct, critical role in student success, including students' academic performance, psychological growth, and program or certificate completion. The availability and breadth of service offerings mediate the relationship between students' ability, motivation, and academic performance. Historically, American colleges and universities have sought to provide an appropriate and conducive learning environment for their students, constructing campus "learning communities" and support service structures that provided for all learner needs from housing to health care and food services. For most traditional campus-based learning experiences, creating "full service" support that responded to student needs meant establishing and maintaining facilities and personnel integrated into the campus environment: a central library facility, offices for admissions, registration, career counseling, etc. that were staffed and open during traditional business hours. The support services were constructed to serve everyone, even if only a limited number of students opted to utilize the services.

The explosive growth of community colleges in the 1960s and 70s, with a focus on serving an older, part-time and "non-traditional" population of students, forced changes in support services away from the traditional 9:00 a.m. - 5:00 p.m. model to accommodate changing learner needs. While still oriented to the campus, more and more institutions found the learners required evening operating hours, telephone registration, and different approaches to extend services beyond the campus. More services became optional and were targeted to specific learner needs, but there was a central core of services that remained—and still remain—designed around the campus or learning site.

Yet learning today does not necessarily center around a physical location. In the age of "anytime anyplace" education, where technology allows students to be hundreds miles from a campus,—indeed, many may never set foot on the physical campus from which they will earn their degree—the campus-based model of delivering services will not work.

According to the recent *Best Practices for Electronically Offered Degree or Certificate Programs* publication from the regional accrediting bodies,[1] an institution's responsibility to provide student services begins at the initial point of contact with prospective students. Once a student has been admitted to a program of study or has been enrolled in a course, institutions have an obligation not only to deliver academic content, but also to provide support that encourages students' intellectual growth. While colleges and universities have moved rapidly in the past decade to develop online courses, even complete degree programs that are independent of time and place, equal effort and financial commitment has not been given for the development or licensing of support services that accompany those courses. Services should be available at the same times that academic courses are, and at least provided in the same asynchronous formats where applicable.

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[1] *Best Practices for Electronically Offered Degree or Certificate Programs* (2000). See http://www.sacscoc.org/commpub.asp

However very few institutions provide a full array of academic and administrative services that can be accessed at anytime from anyplace. A recent survey of *Electronic Campus* students and administrators conducted by the Distance Learning Policy Laboratory[2] found that the majority of student services are offered only on campus during the traditional office hours of 8:00 a.m. to 5:00 p.m. This creates a great barrier to the academic success of distance learning students, the most of which (47%) classified themselves in our survey as "completely remote with no face-to-face contact." Students whose primary study hours are at alternative times, late at night, and after campus business hours are placed at a significant academic disadvantage in accessing necessary services. Policies must be addressed in order to support the development of "virtual" service functions that can be accessed at a distance in real time, interactive environments.

Furthermore, the changing expectations of students, coupled with the growth of virtual technologies, may require campuses to redesign their delivery structures. Evidence is mounting that services designed to serve a distance learner also serve the student who lives on or near the campus. Convenience—the ability to transact business and to secure services when needed—is becoming the watchword for a growing number of institutions. Students of the "information age" are accustomed to services being available "24 x 7" with prompt response from service providers. They will not expect to travel from one office to another and repeatedly provide the same information in order to register, pay fees, buy their books, purchase a student ID, etc. Rather, they expect to be able to conduct multiple transactions in a single procedure—all from the convenience of their desktops. They can bank this way, order tickets, and even renew their drivers' licenses. Thus, they also expect to be able to drop a course, pay a fee, or access a library database from the same computer.

According to the 2001 Campus Computing survey, however, more than 70% of colleges and universities cannot yet process credit card payments over the Internet, and 45% do not offer online registration. As Green (2001) notes, "the issue ahead for campuses is not just eCommerce...but a broader set of eServices issues which support the instructional mission and enhance a wide array of campus services." The change from providing separate services based on individual functions conducted at different locations to an integrated, seamless process will be challenging and costly. But institutions that are creative and flexible enough to meet changing student needs, including the needs of both on- and off-campus students, are more likely to witness student satisfaction and enrollment growth.

The availability and ease of access to essential services for the remote student may be the most challenging issue for institutions engaged in distance learning because of the significant cost involved in both developing new services and redesigning on-campus services for non-campus based students. While some institutions have moved to make their support services flexible and accessible to all students at any time, others have found it easier to develop

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[2] An online survey was placed on the *Electronic Campus* Web site, Web sites of affiliated institutions, and emailed to *Electronic Campus* coordinators. Data on the format and availability of services was collected between October, 2001 and February, 2002. N of student respondents = 267; N of institutional administrators = 88. To view the instrument, see www.electroniccampus.org

parallel service functions for distance learners through separate outlets rather than waiting for campus-based student service offices to reorganize their business practices. Whatever approach or model is pursued, providing needed support services remains a central requirement, and establishing new ways to provide these services a real challenge. In this paper we explore various alternatives or options for providing services for distance learners. We encourage states to establish and develop policies that will encourage and support institutions, systems, and consortia to accommodate the distance learner.

To achieve this goal, a variety of traditional campus-based practices, such as business office functions (including tuition, fee, and other payments), bookstore purchases, financial aid, admission, registration, library, advising, career counseling, and testing need to be modified for learners whose work schedules or physical distance impede them from traveling to campus. The growing use of technology in both on-and-off campus education, furthermore, demands new student services (such as technical support and IT training) as well as new delivery formats (such as the Internet) for all students. While there has been notable progress and a commitment of resources to prepare faculty for teaching in the technological environment, there has not been consistent, widespread commitment to provide support services for distance learners. For example, distance learning students typically begin their study with differing levels of computer knowledge and experience. They may require technical training in basic computer and platform use prior to beginning a distance learning program, just as faculty do. In addition, the distance-learning environment may be associated with unique learner needs such as community building, mentor support, and development of self-regulated learning skills to reduce feelings of isolation and increase student retention.

Meeting Student Needs

Customer Relationship Management: Meeting the Needs and Expectations of Students as Customers

In private industry, the growth of Web-based technology and eCommerce has changed the nature of interaction between businesses and their customers. Customers are now empowered by access to a wealth of information and the ability to comparison shop prior to making informed decisions. Coupled with that empowerment is the rising level of expectations customers place on businesses to use technology to centralize customer information, have it instantly available at all times, and simplify varying transactions into a single, seamless process. The process of attracting, attaining, and retaining customers has therefore become highly competitive—a strategic focus in itself. Effective management of customer relationships can serve as a type of branding; it can differentiate companies from their competitors who sell the same product but may not be able to provide the same level of service.

Customer Relationship Management (CRM) is the process integrating business functions in order to make services more convenient and targeted to the true needs of all customers.

CRM seeks to identify customer thoughts and behaviors in order to improve upon existing customer relationships. Rather than organizing the business around functional departments, a CRM approach seeks to align its business around transactional processes by integrating both front- and back-office systems, as well as IT applications, in order to create consistent and dependable service. For example, customers should not have to provide the same information each time they interact with a different organizational department. Successful CRM involves the development of a single communication channel that links together all possible points of entry in to a seamless, integrated process.

Institutions must move towards a CRM model in which services are designed around the needs of the student, not the institution. Just as in private industry, the growth of Web-based technology in academia grants students the power to select among a greater variety of institutions and courses with the simple click of a mouse. Students today do not have to enroll in a single "home" institution; rather, they can take courses from several institutions simultaneously in order to find the best content that meets their needs and time schedules. Institutions that can provide quality, convenient services that are available at all times and in alternative formats are more likely to distinguish themselves from their peers and grow their enrollments.

Client satisfaction and quality control are not new business models. But in a typical CRM approach, the entire organization works together in an integrated manner under the single goal of meeting customer needs. Implementing CRM requires redesigning functional roles, reengineering work processes, and motivating people to support the new approach. In adopting a CRM model, institutions would need to organize business processes around student needs rather than functional areas. As Kalakota & Robinson (2001) note, "Most companies consider themselves customer focused, but in reality, they are product focused." The same could be said of institutions, which are focused on research within the various academic fields and the "product" of instructional content, not necessarily the needs and perspectives of the students.

A major theme of the regional accrediting bodies' *Best Practices* document on the essential elements of instructional quality is the institutions' obligation to continually assess, revise, and improve upon student services.[3] One way to assess and improve quality is through customer feedback and involvement. In a CRM process, the customer is utilized as a more active participant in both the development and delivery of a service or product. For example, at Liverpool John Moores University, students are represented on panels that review the institution's business processes; students also contribute by both leading and participating in focus groups to define their own service requirements. At the University of Central Florida, online surveys are used to develop suggestions for how to improve student services for distance learners (Greer, Hudson, & Paugh, 1998). The Distance Learning Policy Laboratory student services subcommittee asserts that student input and feedback should be a core element of any assessment of student services.

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[3] *Best Practices for Electronically Offered Degree or Certificate Programs* (2000). See http://www.sacscoc.org/commpub.asp

Quality Assurance at Tomball College. Tomball College located in Tomball, Texas (part of the North Harris Montgomery Community College system; see http://wwwtc.nhmccd.edu), set about improving its distance program by capturing student feedback and using that feedback to improve student services. Like many institutions, Tomball experienced very rapid enrollment growth in its online courses in the past five years, but had a low retention rate (less than 40%). In 1998-1999, over 30% of the distance learning students complained about the experience and inconsistency of the quality of instruction. The most common problems were: poor faculty skills/training, communication problems, unrealistic expectations of what distance learning would entail, and lack of student services for distance learners. In response, the college took several active steps by:

1. *Training its faculty.* Each distance learning instructor is now required to undergo formal certification by the Texas Center for Technology and Distance Learning (located in the Woodlands, TX). The certification program is offered completely online in five modules.
2. *Improving communication.* Instructors are required to reply to student questions and grade or comment on assignments within 24 hours; students are also guaranteed 24-hour access to the course syllabus online. Student-to-student communication has been improved by the creation of course chat rooms that allow for student discussions.
3. *Increasing the availability of its support services.* Now, students are provided with realistic information and a self-assessment instrument that helps students decide whether distance learning is "right" for them. In addition, orientation to the institution, academic department, and course are all provided online. Other online services include: help desk, admissions/registration, textbook purchase, library resources, and advice on how to best "cope" with distance learning. In addition, there has been an increased emphasis on student advisement and online self-assessment modules to help students regulate their own learning.

Student services do play a critical role in student learning and success. After these changes were implemented, the retention at Tomball rate had climbed to 75% by Spring, 2001, then to 85% for summer, 2001. The number of student complaints has dropped from 214 in 1999-2000 to 11 in 2000-2001.

Self-service. A CRM approach also seeks to provide greater, more easily accessible information for customers in order to allow for self-service when at all possible. This may take the form of posting FAQs on a technical support Web site or allowing students to review their transcripts and register for courses online. Granting students more access to information, coupled with their ability to perform automated transactions, can allow administrators to concentrate on their other, more central job duties.

Several educational organizations have called for the modification of services that are designed around student needs. The "Guide to Developing Online Services" (Western

Interstate Cooperative for Higher Education, 2001) stresses that an institution should design its online services to be available to a student for whom a trip to campus is not feasible. The project has focused on improving student services for distance learners, but recognizes that there is also a tremendous benefit for on-campus students when services are provided in a flexible format that is independent of time and place. The Guide provides general tips for designing effective online services, describes the ranging needs of distance learners, and lists good practice examples in delivering services. It stresses the importance of decreasing institutional load by making students more active in administrative processes and allowing them to have greater access to information and services.

The WICHE guide outlines a continuum that institutions can follow to gradually increase the use of technology in delivering student services:

1. Post information on courses, curriculum, and student services.
2. Create links to and from the institution's Web site to external Web resources for each student service, such as financial aid (NASFAA) and career services (monster.com).
3. Provide Web-based applications for admission and registration.
4. Provide a Web interface to student records with password protection, so students can manage routine transactions themselves.
   A. Allow students to change their contact information and have read-only access to transcripts.
   B. Provide self-help services and resources to students, with information on how to contact an institutional representative if necessary.
5. Provide a services campus portal with links to all student services that are available online.

Services for All Students

> *Recommendation 1: Institutions should ensure that all students have comparable and adequate access to needed services whether they are traditional, non-degree, part-time, distance, disabled, or "home" students of the institution.*

A number of institutions that are moving more services into an anytime/anyplace access mode are finding that this approach is very attractive and desired by traditional as well as distance learning students. For example, Santa Fe Community College (SFCC) in Gainesville, Florida has established a CRM culture that fosters innovation while focusing on student learning and student success. To achieve this goal, student services were re-engineered in 1998 to be integrated with academics and to ensure that consistent student services were available both online and on campus. Eighty percent of all college services are now organized under the vice-president for educational services, including: student services, student activities, all academic programs and academic resources, staff and professional development, academic technology, and financial aid.

SFCC does not differentiate between the distance and on-campus students; rather, it focuses on student learning and the best approach to meet different learning needs and styles. As a

result, SFCC has found a higher level of student satisfaction when students are able to self-select the mode in which they learn and interact with the institution.

Yet at many institutions, there are certain populations of students who still face barriers to accessing student services to support their education.

Services for the Disabled. Many students with disabilities experience barriers in accessing services provided in an electronic format. As described in the Policy Laboratory's *Universal Access to Technology and Support* parallel report, online courses and services need to be designed, from the start, to be accessible by all students, including those with disabilities. Just as campus buildings are equipped with accessible ramps, hallways, and bathroom facilities, so too should an institution's virtual services be designed to meet a diverse set of physical needs.

For example, students with visual impairments may not be able to read important online text or see graphics, while those with hearing disabilities may miss important audio information accompanying a software tool. Web address links are often too long to remember when they are spoken aloud, and pull-down menus (such as lists of states or countries of residence) are particularly long when provided in auditory form (Johnson, 2000). Software which automatically reads Web text often cannot make sense of graphics which are not accompanied by alternate text descriptions. Web designers should provide all information in several alternate forms, such as audio descriptions of video clips, closed captioning, or large-print text descriptions of graphic images that can be printed (Solomon, 2001).

Presentation of information in several different formats should be automatically built into any strategic plan to move services from an on-campus to an online format, as "retro-fitting" Web pages in order to meet disability standards is extremely costly and time-consuming. Estimates of redesigned instructional courses range from $5,000-15,000 per course (Edmonds, 2002). It is much more cost effective to design a Web site with the needs of students with disabilities in mind from the beginning.

Web designers should be familiar with the Internet accessibility standards recently adopted by the federal government and use those standards as a baseline to meet minimum accessibility requirements. These guidelines, known as the "Section 508" standards, provide information and guidance on making Web pages accessible for all students. Web designers should also be aware of other resources and ideas to provide maximum accessibility for students with disabilities.[4]

Services for "Transitory" Students. Because distance learning allows students to enroll in multiple institutions and state systems in order to meet their particular learning and schedule needs, it is possible for students to simultaneously enroll in several different institutions—

[4] The Southeast Disability and Business Technical Assistance Center at Georgia Tech is a good resource for educational Web designers to get information about accessibility to information technology in education. See http://www.@catea.org/

they may even pursue their education without enrolling in a single "home" institution. Even though these students have not been formally registered as "belonging" to a certain college or university, if any institution offers a course, it has an obligation to provide accompanying services to all enrolled students, whether they are "home" students of that institution or not. Colleges and universities need to design all of their services with these types of nontraditional, transitory students in mind.

Distance Learning Student Needs and Attitudes: Findings from the Policy Laboratory Survey

While the majority of services needed by distance learners will be similar to those offered on campus, institutions may need to create new and different services geared to the unique needs of distance learners or modify existing services in order to deliver them in new and different ways. In order to determine the needs and experiences of distance learning students, an online survey was placed on the *Electronic Campus* Web site and Web sites of affiliated institutions.[5] Data collection began in October, 2001, and continues to date. Analysis of the data obtained to date was conducted in April, 2002, and the total number of student respondents at that time was 378. In addition, 88 institution administrators completed a parallel version of the survey which asked them to indicate the services that are offered by their institution, what hours they are available to students, and in what format they are delivered.

Service Format and Availability. The survey found that the majority of services are only offered on campus, from the traditional office hours of 8:00 a.m. to 5:00 p.m. While 34% of all services are available online, only 16% of all services are available on a 24 x 7 basis. This creates a great barrier to the academic success of distance learning students, most of whom classified themselves in our survey as planning to complete "all or most" of their education via distance learning (46%) through courses that are "completely remote with no face-to-face contact" (51%).

A similar study of 54 college and technical colleges conducted by Southwest Texas State University (Luedtke, 1998) found that although distance learners typically require the same services available to on-campus students, there are an inadequate number of support services available in an online format. The lack of available services for distance students requires them to come to campus, particularly for advising and counseling services. This creates a great barrier to the academic success of distance learning students. Students who are unable to travel to campus or whose primary study hours are at alternative times are placed at a significant academic disadvantage in accessing necessary services.

Core Service Areas

The Student Services subcommittee decided that each student service area can be conceptualized as falling somewhere along a continuum from the most important (critical for

[5] To view the survey instrument online, go to www.electroniccampus.org

student success) to least important (a supplementary service that is not critical, but can enhance the line of service offerings an institution provides).

To identify the core services, survey respondents were asked to categorize each student service using a 3-point classification scale (1 = critical, 2 = important, and 3 = supplementary), in terms of its centrality of to student learning, academic achievement, and social success.

Importance Ratings. The survey identified several notable similarities and differences between students' and administrators' perceptions of what "core" services should be (See Tables 1 and 2 in Appendix A).

Combined results of both administrative and student samples found that the five most important services were, in order of descending importance: 1. Registration, 2. Admissions, 3. Tuition and fee payment, 4. Library Services, and 5. Technical Support. The bottom five services were, in order of descending importance: 14. Placement Testing, 15. Career Services, 16. Pre-enrollment hardware assessment, 17. Pre-enrollment computer skill assessment, and 18. Health and Counseling Services.

Colleges and Universities should assess each type of service they offer and consider the impact of each on students' access to education, learning, and academic success. Whether a particular service is considered a "core" service area should be carefully considered in decisions regarding outsourcing and unbundled fee packages (see the *Outsourcing* and *Unbundling* sections below). Furthermore, when moving services from an on-campus to an online or call center format, institutions should concentrate on making available the most critical services first, followed by the less critical offerings. Ultimately, all services should be made available to all students, regardless of their physical proximity to the campus.

Student Demographics

Findings from the student survey show that they report high levels satisfaction with distance learning and the benefits it provides. Distance learning is meeting the needs of nontraditional students, most of whom work and/or care for their children. Comments regarding students' experiences with distance learning were mostly positive. Clearly, distance learning is having an impact on increasing access to nontraditional student populations who are new or returning to higher education.

The largest percentage of students (30%) are enrolled full-time in 12 or more courses per academic term. Furthermore, most (46%) plan to complete all or most of their education via distance learning, and most (51%) classify themselves as "completely remote" students with no face-to-face contact in their courses.

About one-third of the students are in the 36-45 age range (33.1%), and another third are in the 25-35 age group (32.5%). Most students classify themselves as "suburban" (41.5%), but there is also a significant number of students in the "rural" region (38.6%). The closest

university is an average of 24.12 miles from where students live and an average of 21.68 miles from where they work.

Distance Learning Benefits. When asked their primary motivation for enrolling in a distance learning course, the largest percentage of students responded that: "the offerings are more convenient for my work schedule" (35.2%), followed by "the offerings are more convenient for my personal schedule (such as family demands)" (19.9%).

When asked whether they would have enrolled in higher education if distance learning were not available, a significant number of students (39.4%) responded that they would not have enrolled otherwise. Though the majority of students did report that they would seek some form of postsecondary degree through traditional, on-campus study (56.1%), when asked why or why not, many of these answers (N = 56) were followed by qualifying comments such as (in order of descending frequency):

Yes

- Yes, but it would have taken longer time/fewer classes at a time
- I would enroll on campus to get the education/courses I need
- Yes, but it would have been difficult to do
- I would enroll on campus because I do not like distance learning
- Yes, but I prefer online classes
- Yes, but I would have a degree that does not interest me as much
- Yes because there are not enough courses available in an online format to complete my degree

No

- No, due to my work schedule
- No, distance learning is my only option
- No, due to family care responsibilities
- No, due to the distance to campus
- No, due to financial reasons
- No, due to a physical disability
- No, because courses I need are not available locally

Overall, most students report being "very satisfied" with distance learning (37.8%), followed by ratings in the "satisfied" category (25.9%). The average satisfaction rating was 1.94, which corresponds to a rating of "satisfied."

When asked why they were or were not satisfied, several advantages of distance learning were mentioned (N = 155; presented in order of descending frequency):

- The learning is self-directed/I am learning at my own pace/The format fits my learning style
- Distance learning fits my work schedule
- Distance learning provides greater flexibility
- Distance learning fits my family responsibilities
- Distance learning provides greater attention from and better interaction with professors
- Distance learning is allowing me to complete my degree
- Distance learning saves commuting time
- Distance learning is providing an opportunity for career advancement
- Distance learning better accommodates physical disabilities

Delivery of High-Quality, Just-in-Time Services for Distance Learners

Realistic Recruitment of Prospective Students

> *Recommendation 2: Institutions should develop and provide realistic previews of the distance learning experience for potential students during the recruitment process.*

Institutions must be sensitive to the needs of distance learners and ensure necessary access, either by delivery of these services in new and different formats, by extending/expanding the current services, or creating arrangements with other providers. Although distance learning can provide many benefits, it is not appropriate for all students and learning styles. The accrediting bodies (2000) state that prior to admitting a student into a program, the institution should take steps to provide information that is "sufficient, fair, and accurate" regarding:

- Hardware and other required technologies, as well as the technical competence required
- Costs, payments, and refunds
- Curriculum design, course length, and learning objectives
- Available support services
- Student responsibilities and potential challenges of learning in a technology-based environment, including the level of personal discipline required

Institutional responsibility begins at the initial point of contact with prospective students, who must be given an accurate description of the distance learning experience in addition to course offerings and program costs. Even though most students reported high levels of satisfaction with self-directed learning and minimal direction from the instructor, they also qualified their comments with statements about the amount of time and effort required by distance learning:

- *I've learned the material in most classes by myself at my own pace, but you must be self-disciplined and motivated enough to succeed.*
- *It is much harder doing it alone, but I feel like I have learned the courses better* [sic].
- *There is more independent reading and studying, but it is a more enriching learning experience, which translated to a better learning, including better knowledge retention.*

A survey of adult distance learning students conducted by the University of Central Florida identified the two qualities most related to success in online learning: time management and self-motivation skills (Greer et al, 1998). Though the majority of students in the Distance Learning Policy Laboratory survey reported high levels of satisfaction with the self-directed learning style required in online courses, many students may be unprepared for the amount of self-discipline required or have unrealistic expectations as to the time, effort, and skills necessary to succeed. The Policy Laboratory survey revealed that several students reported a preference for face-to-face interaction and traditional lectures:

- *There are too many weekly assignments. This does not occur when you are in class physically.*
- *There is too much time wasted reading all classmates' comments that you would not have if one were in the classroom. Reading sentences takes much longer than listening to instructors or student opinions in the classroom setting.*
- *I miss the classroom interaction.*
- *I like the traditional classroom better and would rather have face-to-face time.*

Prospective students need adequate information in order to decide whether distance learning will fit with their learning style. One way of addressing this problem is through the use of realistic recruitment processes. Realistic recruitment is often used by businesses to decrease turnover and increase job satisfaction among newly hired employees. It typically involves a "realistic preview" (RP) of the position, or the presentation of all of the pertinent information about a job—both the good and the bad—without any distortion. Realistic Previews can screen out those who will later be dissatisfied in a job and better prepare new hires for the job experiences ahead of them. RPs typically increase job tenure, commitment, and performance, as well as lower initial expectation levels, decrease attrition from orientation programs, and reduce job turnover.

Why realistic previews work. In a meta-analytic review of several RP studies, Wanous, Poland, Premack, and Davis (1992) suggested that "unmet expectations" on the part of new employees are frequently reported. New hires often view their organizations as not having lived up to what they perceived as an agreed-upon arrangement in terms of organizational climate and actual job responsibilities. Providing realistic job information to applicants results in a better understanding of the job and what it will require. This allows for self-selection out of the organization if applicants do not possess those skills or interests, as well as a better person-organization fit among those who accept the position. Increased fit is hypothesized to result in higher levels of job satisfaction, lower voluntary turnover, and

higher levels of performance. Accurate understanding of job requirements allows for new-hires to prepare coping responses to problems before they actually arise.

Like new-hires to an organization, first-time students, whether new to a particular institution or to distance learning in general, are often unsure of what the distance learning experience entails and unclear about what their role as a learner will be. As described above, students often report dissatisfaction with the amount of time spent communicating via email and chat rooms; they also report frustration with a lack of prompt and unambiguous feedback from professors, technical difficulties, feelings of isolation, and lack of personal, face-to-face interaction. Students are often unprepared for the amount of self-discipline, time, and motivational commitment distance learning requires. Yet the distance learning process can be highly rewarding for those students who value self-regulated, active learning.

Realistic Previews can serve several beneficial functions for both students and institutions by:

- Establishing role clarity for students
- Developing realistic expectations and coping responses among students before problems arise
- Identifying "at-risk" students or skill development requirements
- Allowing students who prefer face-to-face interaction to self-select out of distance learning, saving both students and institutions time and money
- Increasing student retention and degree or certificate completion

Several institutions have done a good job at providing a "peek" of the distance learning experience. The Community College of Southern Nevada, St. Petersburg College, and Brevard Community College all provide a screening instrument in the form of a simple questionnaire that provides instant feedback on whether or not students fit the profile of a successful distance learning student.

While these efforts are commendable, many Web pages geared to potential students could be improved upon in several ways. For example, several merely provide a list of skill requirements for distance learning; these Web pages should be more detailed and specific than they typically are. Students need *concrete* examples in order to form accurate judgments of their ability to succeed in the distance learning environment. Vague phrases such as "requires time management skills" do not provide enough information for students to make an accurate assessment of whether they have the time management skills specific to the requirements of an online program. Detailed, realistic examples based on the experience of real students can provide a single frame of reference with the same meaning to all students.

Constructing a realistic preview. Content should focus on the most important aspects of the activities that a distance learner will perform, those most related to course or program withdrawal, and the aspects of distance learning that are the most misperceived. For example, a few students in our survey cited an interest in distance learning because they heard it was less time consuming, but reported a frustration with the amount of time

distance learning courses actually require. Furthermore, distance learners often cited a conflict between the requirements of their family and/or work and those of their education. Students must be prepared for this conflict before enrolling in a distance learning program, and provided with training in how to best manage these types of problems.

In order to be most effective, realistic previews should be drawn from actual student experiences. Information that comes from real students will be more believable, effective, and memorable: It will have a greater impact. One of the most commonly used procedures for developing realistic previews is the "critical incidents" technique. This technique asks incumbents with experience in the job role to detail actual, significant episodes that have occurred in the course of their day-to-day jobs, how problems were actually handled, and the result of that action. Focus groups of experienced distance learning students could be used in a similar manner to describe critical incidents that occur during a course term.

Using a critical incident process to develop realistic previews can serve an additional role in helping institutions evaluate existing services and maintain ongoing quality assurance. As previously discussed, part of a successful CRM venture is to actively seek and utilize student feedback to improve service offerings. The regional accrediting bodies (2000), furthermore, assert that institutions should undertake the continuous assessment of student services in order to maintain and improve their quality.

Once critical incidents have been collected from real students, these descriptive paragraphs of actual incidents should be clearly communicated; and, in order to be most effective, they should be provided to prospective students as early as possible in the recruitment process. Thus, it may be helpful to display the previews prominently on prospective student Web pages prior to any further information on Web-based courses and programs.

Orientation Programs

> *Recommendation 3: Institutions should provide orientation for all distance learners that adequately prepares them to use technology, manage their time, and regulate their learning. Orientation should inform students about all institutional policies and available student services.*

The traditional array of services provided for an on-campus student may not be appropriate for the distance learner or it may need to be provided in new and different ways. One service that will need to be delivered in an alternate format, as well as to cover content unique to distance learning, is student orientation.

Orientation should focus on preparing distance learners for all aspects of the independent, often remote, learning experience. Distance learning places high demands on the individual to remain task-focused, particularly among working adults who are trying to juggle their education with competing career and family demands. Distance learners may require pre-

training in the areas of information literacy, self-study, and time management as well as the online communication norms specific to the institution or academic department.

Students may require training in study methods and learning styles specific to the distance learning environment, such as self-discipline, active learning, and working independently. The Policy Laboratory survey found a significant need among distance learning students for "distance learning coaching" services. A comparison between student and administrator ratings of the importance of "distance learning coaching" shows that students place a significantly greater importance on this needed service than do administrators X^2 (2, N = 287) = 18.802, $p < .000$. This finding is significant, given the range restriction among administrators, who rated all other services as more critical than student respondents did.

In addition, students will require a more in-depth preparation for using technology such as email, Internet, and course platforms, as well as how to contact tech support in the event of any problem. Findings from the Distance Learning Policy Laboratory survey also show that students report high levels of frustration with technology-related problems:

- *The timed quizzes were faulty at times and booted me off in the middle of taking them.*
- *There is no one to contact for immediate help with problems such as online tests that don't function properly.*
- *I experienced horrible network issues. Their Internet outages are frequent and long.*
- *Have had a lot of trouble with teleconferencing. There is no assistant from remote site personnel.*
- *My last online class was cancelled due to server problems.*
- *Problems arose with the system and having access to it or having postings properly noted.*

Students should not be expected to learn and adapt to using course platforms on their own, and instructors should not be expected to bear the burden of training students to use the software or course platform in addition to teaching course content. In a survey of student services conducted at the University of Central Florida, distance learning students suggested that orientation should concentrate on technology training, specifically, how to use the institution's Web-based course platform, online library catalogue, and Internet search engines (Greer et al., 1998). The accrediting bodies (2000) emphasize that technical support is a central service that must be provided for all distance learners, and that it should be provided through both technology help desks and pre-training, each of which are equally important to student success. Training in the use of course platforms and related software programs can prevent potential problems, while support desks can guide students through problems as they occur.

Orientation should be provided to all students and should be accessible at all times—not only at the start of an academic term or calendar year. Distance learning courses do not always follow a traditional academic term schedule, and courses may be compressed into shorter formats or extended across longer timeframes. Therefore, orientation needs to be

provided on a continual basis, independent of the traditional calendar year. Before students complete the registration process, information on orientation should be clearly and predominantly displayed on the institution's Web site. Furthermore, because distance learning allows students to enroll in multiple institutions and state systems, it is possible for students to enroll in higher education without a "home" institution. Institutions offering distance learning courses need to provide orientation to all students, whether or not those students are enrolled as a "home" student.

In addition, a thorough overview of all the student services that are available, as well as how to access them, should be provided in an orientation program that is specific to the needs of distance learners. Student respondents to the Policy Laboratory survey reported being unaware if the particular services were offered and in what format. Students skipped or did not answer many of these survey questions, noting in the "comments" section that they did not know if that service was indeed available in any format. The WICHE Guide recommends that online and distance learning services should be featured prominently and clearly described on institution Web pages.

Some institutions provide orientation through a required, for-credit course. Others, such as St. Petersburg College[6] and the North Harris Montgomery Community College District[7], require students to complete an online orientation tutorial prior to enrolling in any online course. The interactive orientation at St. Petersburg lists and describes institutional policies and terms such as "full-time" course load, the different degree and certificate programs available, degree requirements, student rights and responsibilities, the number of hours student are expected to spend studying outside of class time, how to use WebCT, and all available student services as well as how to locate and best use them. Although not a required course, Penn State University's World Campus 101 provides a central Web site for distance learning students that describes what's it like to be a Penn State World Campus student, how to use online course materials, how to interact with instructors and fellow students, how to best use academic resources, and how to access the various student services when they are needed.[8]

Student Mentors

> *Recommendation 4: Institutions should develop a mentor program for distance learning to motivate students, model appropriate behavior, tutor academic needs, and provide academic advising/support.*

The Policy Laboratory survey found that students frequently report frustration with not receiving adequate and timely feedback from their professors as well as feelings of isolation from the institution and other students. Distance learning students often lack the immediate feedback from instructors that is available in synchronous, face-to-face learning, where

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[6] see http://www.spjc.cc.fl.us/

[7] see http://ecampus.nhmccd.edu

[8] See http://www.worldcampus.psu.edu/pub/index.shtml

students can raise a hand or see the instructor after class. Support services, which are fundamental to student learning, may be even more important for the distance learner, who does not have access to informal social support systems found on campus. Whereas students on campus have a greater opportunity to learn "the ropes" from one another through personal interaction, online students report isolation and a sense of "going at it alone."

A few write-in comments from the Distance Learning Policy Laboratory illustrate students' concerns with faculty communication:

- *Instructors should make their material more explanatory for online students that don't have the interaction and the ability to ask questions right away when they need to*
- *There has been no feedback concerning grades and homework assignments. It is difficult to communicate problems to the instructor.*
- *Communicating via e-mail/Web is difficult for some Professors. It is very easy for them to hide behind technology and avoid interaction with students (I call them "ghost professors"). It is difficult to complete coursework to the best of your ability without timely guidance or feedback from instructors, which is extremely frustrating for students.*
- *Instructors are not available when students need them or they do not respond back and help the student when they needed it*

Students need to feel comfortable in expressing their confusion, anxiety, and uncertainty to the instructor (Hara & Kling, 2001). The Western Cooperative for Educational Technology (WCET) recently conducted an email inquiry for research topics related to electronic student services. Respondents to a listserv were asked to name the three services that they perceived as the highest priorities for institutional improvement or development. The top three priorities were, in descending order, academic advising, tutoring, and technical support (Walker, 2002).

One way to increase the communication of student needs, prevent potential problems, motivate students, model appropriate behavior, and provide technical support is through a student mentor program. Mentor programs have been linked to higher levels of overall student satisfaction with the college or university as well as the development of better mechanisms for coping with potential problems (Dyson, 1996). When distance learning is supported by mentors, students master course objectives more quickly, feel more connected to their university and fellow students, and are less likely to drop out (Hayes, 2002). As noted by the accrediting bodies (2000), institutions have an obligation to take steps to retain students in a distance learning program once they have been admitted.

Mentors can play a critical role in student retention. In an investigation of student decisions of whether to remain in a course or degree program, Heath (1991) discovered several factors related to retention. These included: orientation programs, identification of high-risk students, use of mentors, contact with faculty, and an institutional culture that encourages goal commitment. Furthermore, distance learning students enrolled in Internet-based

courses at the University of Central Florida rated mentoring, particularly the encouragement received from one's mentor, as the most appreciated and effective method of instructional support (Greer et al, 1998).

The British Open University Tutor Program

In the Open University model, academic tutors serve as mentors who help students by explaining course materials, answering questions, marking assignments, and providing feedback. To reduce feelings of isolation due to the lack of personal interaction, each tutor is assigned based on students' geographic location, which provides an opportunity to physically meet with the tutor and other local students in person, if the student is near a designated regional center. If students cannot travel to the specified location, telephone contact and email exchange are typically used.

FSU Student Mentor Program

Florida State University has developed a unique program aimed at increasing student retention through the use of student mentors who serve as supportive "safety nets." Mentors are members of the FSU Course Instruction Team whose primary role is to provide personal contact for a small number of distance students. Mentors are recruited from community college faculty and adjuncts, advanced graduate students, and by referral from other mentors. They typically have advanced degrees and/or professional experience in the academic discipline they support. Mentors coach student learning, monitor student progress, and provide a caring, supportive presence for those they assist. Communication is usually conducted electronically through the course Web site, which includes e-mail and discussion boards. Mentors may also use phone or face-to-face communication in some instances.

Mentors at FSU are provided with training and resources on study skills and teaching techniques. They are also trained to communicate often with students and to respond to student questions within at least 48 hours. The goal is to provide a "zone of familiarity" and consistency that the student can rely upon in an otherwise remote and unfamiliar environment. Mentors work to instill a sense of confidence in their students, develop academic competencies, and provide guidance and feedback in using course tools effectively. The mentor is both a social supporter and as well as a content guide, trained to be aware of the challenges that remote learners typically face (Hayes, 2002).

The mentor program has been quite successful in increasing student retention in distance learning programs at FSU. During the first academic year of 1999-2000, mentor-supported courses had an 87% completion rate, and 83% of all students earned a grade of "C-" and higher. During the second year, the completion rate grew to 93%, and 70% of all student grades were concentrated in the "A" to "B" range (Hayes, 2002). The retention rate for fall 2001 rose to 94% (Hayes, 2002).

Creating a Distance Learning Community

> *Recommendation 5: Institutions should work to develop a learning community through a centralized Web portal designed specifically for distance learning students.*

The regional accrediting bodies (2000) stress that education is best experienced among a community of learners, and that learning is a dynamic and interactive process: "A sense of community is important.... Institutions should create an academic community of learners" through all institutional policies, statements, and actions.[9]

Students often learn as much from each other as from course materials and the instructor. Interaction with others can help students learn how to propose their ideas, have them criticized or expanded upon, and how to reshape them based on peer feedback. Wegerif (1998) discusses the importance of social aspects of a learning community to student satisfaction, performance, and retention. He notes that the success or failure in an online course depends on whether students are able to "cross a threshold" from feeling like outsiders to feeling like insiders. Wegerif (1998) recommends that institutions work to build a sense of community and in-group cohesiveness among students by ensuring that students have the opportunity to share ideas, interact, and learn from one another.

One way to create a sense of community among distance learners, who often feel isolated and disconnected from both the institution and their peers is to develop a customized Web portal designed around the specific needs of distance learning students. As Looney and Lyman note: "Campuses have not yet taken advantage of the portal technologies that are used by companies... They have rarely used portal or other Web-based options to customize and personalize information for different segments of the campus community ... or create a virtual lifelong community" (2000).

A Web portal, customized around the specific needs and perspectives of distance learning students, is an excellent method for creating a sense of community and retaining students. The ideal distance learning portal would provide links to information on campus policies and allow students to conduct business transactions as well as register, review transcripts, update contact information, and post questions to administrators, mentors, and instructors. The portal should provide information on the social, commercial, and administrative policies of the campus, with automatic links to those services. It should provide a communication outlet among distance learners where students can exchange ideas and build a common culture.

For example, both St. Petersburg College's eCampus and the Dallas County Community College's TeleCollege portals are central Web sites that provide information on available

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[9] *Best Practices for Electronically Offered Degree or Certificate Programs* (2001). See http://www.sacscoc.org/commpub.asp

courses, registration, technical support, how to use the course management system, FAQ's about the portal, how to determine whether distance learning is "right" for you, and an administrative contact who is responsible for working with distance learning students only.

Other institutions have taken creative means to design student communities. For example, Washington State University, where the average student is about 35 years old and is returning to higher education after a long period of time, has established an online student government for distance learners that is specific to their particular needs, interests, and welfare.[10] Because many students need assistance in making the transition back into higher education and to online learning, the student government representatives also serve mentor roles by spending time each day responding to email messages from their fellow students.

Unbundling and Fee Packaging

> *Recommendation 6: Institutional leaders should be encouraged to develop new and innovative funding models, such as unbundling and fee packaging, to meet varying student needs.*

The traditional model of providing all services to all students regardless of their use has always been a complex, somewhat controversial issue. While some students may use an athletic complex each day or attend every home football game, others may never use any service other than the basic academic and administrative core such as library services and registration/business office functions. But the growth of online learning has aggravated this issue and brought it to a more public debate: Simply put, fees for some services may not be appropriate for students who never set foot on the physical campus. For example, most students who take online courses end up paying for campus-based services they never use, such as athletic, health, transportation, student organization, and parking fees.

In addition, students are becoming more savvy consumers in deciding among different colleges and universities. As institutions compete for distance learning enrollments, they are beginning to rethink their fee policies in order to gain a competitive advantage. For example, the University of Connecticut's College of Continuing Studies does not charge distance learning and off-campus students the requisite transportation fee that supports the campus bus system (Carnevale, 2001). The University of Wisconsin System has granted authority to its member institutions to offer various campus-based services on an optional basis within a segregated fee structure for distance learning students, yet not all of the institutions have adopted the policy (Carnevale, 2001).

While some institutions do not charge online students for a few of the services they do not use, most institutions still charge distance students for most of the campus-based fees; they may also add technology fees for distance learners that may, in the end, cost more than the discounted campus-based fees. Often distance learning students are confused when trying to

[10] See http://www.distance.wsu.edu/

determine what fees they are and are not expected to pay, especially as they enroll in multiple colleges or universities who each impose different price structures.

In addition, colleges and universities face difficulties in trying to separate the campus-based from the completely-remote students—determining what to charge the different types of students who fall along different points on that continuum can be a lengthy and complex process. In addition, the needs of all distance learners, just as those of on-campus students, will vary significantly among different students and between the different stages of their academic careers. Not all students will require all services all of the time. Therefore, student service structures should be designed to be flexible and tailored to meet those varying individual needs. One way of achieving this flexibility is to "unbundle" services by offering students the option to pay for only the services they use either on a per-use or per-term basis. Institutions may consider offering different "packages" of services that are provided on a cost-recovery basis. While "core" service areas that are central to student achievement should be provided to all students within a flat fee charge, institutions should consider unbundling other, tangential services and offer them on an optional or per-use basis. Furthermore, the additional technology charges for distance learning may bear the market because students are willing to pay more for increased convenience.

Unbundled charges will not be appropriate for all service areas, such as services for prospective students. Many institutions, furthermore, are only beginning to investigate the issue of unbundling and may face legal barriers to the adoption of optional fee policies. For example, additional fees beyond a base charge are not permitted in the Dallas Community College System by a legislative mandate; the system can only charge one large flat fee for all services, and must be included in the tuition base. Other institutions may face similar restrictions.

Outsourcing

> *Recommendation 7: Institutions should consider outsourcing services to other institutions, consortia, or outside vendors to provide services where appropriate. Partnerships with third-party providers may be very beneficial in terms of financial savings realized by the institution, as well as in the breadth and quality of services available to students.*

Outsourcing can be an effective way to increase the quality, variety, and level of services available to students as well as the times those services are available. Most institutions already outsource a variety of operations such as food, transportation, bookstore, health centers, and building maintenance. The rapid changes in technology, increasing dependence on computer applications for delivery of campus-based services, and growth of distance learning create the opportunity for many new or potential outsourcing arrangements.

Application Service Providers

Applications Service Providers (ASPs) provide software applications and Web-hosting services from a remote location to clients on a contract or subscription basis (Deddens, 2001). Typically, the applications are delivered using the Internet or a private network. Services can range from providing access to a single software application located on a remote server to management of entire IT solutions, including infrastructure and technical support. The ASP business model can control investment, maintenance, and administrative costs by reducing the technology platforms for which an organization is responsible, including associated infrastructure and staffing.

Use of ASPs, primarily within private industry, has exploded in recent years. Worldwide spending on ASPs from 2000 to 2001 more than doubled from $1 to $2.8 billion, and varying estimates predict it will reach between $14 and $24 billion by 2005 (Surmacz, 2001). The slowing economy and recent economic downturn has driven interest in ASPs as a means of reducing staffing and infrastructure costs.

The use of an ASP can increase service levels and provide budget flexibility by reallocating funds from internal personnel and equipment costs to annual service contracts, allowing institutions to focus instead on their core competencies of instruction and research. "The rationale is that an ASP concentrates on these elements and thereby maintains a higher level of expertise and service than can be maintained by an institution internally" (Deddens, 2001). Use of an ASP can simplify business processes by providing predictable annual costs and automatic software upgrades. ASPs can also provide more expert and specific IT skills than an organization may possess in-house.

Yet only a small minority of colleges and universities currently subscribe to ASP services. McCord (2002) estimates that only about 10-20% of postsecondary institutions outsource portions of their distance learning, application maintenance, data center, and Internet management functions. Interest in academia may increase in the next few years for several reasons, such as: the cost of attracting and retaining qualified IT personnel given their high demand in private industry; the increasingly high level of services demanded by students; and competition with other institutions to provide superior IT services as a means of attracting prospective students.

Determining whether to outsource

A decision to outsource should be made only after weighing the benefits against potential risks. Whether building on successful traditional outsourcing scenarios or starting from scratch, a plan for outsourcing should be developed. The plan should outline criteria for selecting partners and contractors as well as the means to evaluate their work (Accrediting Bodies, 2000).

In the business of education today, one might be hard pressed to find a service for which some entity does not offer outsourcing services. This large field offers many opportunities to institutions, and also presents the daunting challenge of sorting through the field for a provider that fits an institution's needs. Institutions should consider the following factors in deciding whether to outsource particular services:

- Will outsourcing this service save money? (In the areas of labor costs, technology costs, etc.)
- Will outsourcing this service better serve our students?
- What hidden costs exist in outsourcing this service? (i.e. The cost of adapting vendor applications to existing infrastructure.)
- Has this service been successfully outsourced by others?
- Is this service mission critical? (i.e. Do we trust an outside entity with this responsibility?)
- What would the consequences to the institution be if the outsource vendor failed to deliver the service or raised the price so as to be unaffordable? Are we prepared for these risks? (i.e. Do we have a realistic back-up plan and available finances to cover the costs of providing that service while seeking legal action against the vendor?)
- What role or responsibilities will the institution retain for the service even if it is outsourced?

In addition, the Western Cooperative for Education Technology (WCET) is developing a set of resources called EduTools (www.edutools.info) designed to help educators analyze and compare vendor-produced course management tools, instructional and student support software products, outsourcing vendors, and e-learning policies. EduTools builds on the work of British Columbia's Centre for Curriculum, Technology & Transfer (www.c2t2.ca/landonline). EduTools can be helpful in making decisions about various online products and services, and SREB states and institutions are encouraged to review and consider use of the WCET tools. Further, through SREB's Educational Technology Cooperative, states should share and advise one another on their own experiences with outsourcing and individual vendors.

Seeking and Contracting with Vendors

Outsourcing can increase system reliability and availability, increase service levels, and increase the diversity of services offered. However, a poorly defined needs assessment, poorly researched vendor, or poorly written contract can result in increased costs and decreased service (McCord, 2002). In deciding among different for-profit vendors, institutions should not overlook other possibilities such as consortia arrangements that can handle the service, or other institutions that are already providing the service and are willing to expand. Both of these can be a viable and cost-effective means of outsourcing.

When interviewing vendors, it advisable to entertain a reasonably large number of vendor proposals. Interacting with vendors is an excellent way of learning what question to ask, and to further explore an institution's own needs based on these conversations. Proposing vendors are typically experts in their respective fields from whom much can be learned, even if they are not the successful bidder.

All contracting parties should realize the flexible nature of distance learning, and ensure there is an option to adjust that contract accordingly. Key questions to ask might include:

- Does the vendor offer the exact service we need?
- Does the vendor have a record of offering this service?
- Is the company stable?
- Is the vendor offering the level of accessibility and support we require?
- Does the vendor have a clear understanding of distance learning and appear dedicated to providing services to support distance learning?
- Does the vendor have references?

In order to negotiate the best price, institutional leaders must clearly understand, prior to contract negotiation, the actual costs involved in providing that service. Research must be done beforehand to determine the real costs of equipment, personnel, hardware and software, training, overhead, utilities, etc. It may be necessary to bring in experts to define needs, research service providers, and negotiate contracts if that expertise is not available internally (McCord, 2002). Experts can include lawyers, contract negotiators, IT professionals, or any people skilled in negotiating and managing contracts.

Contracts should clearly define, in quantitative terms, the service level that is expected, penalties for not meeting those levels, and the terms under which the contract can be broken. As the accrediting bodies (2000) note, contract agreements should be carefully and thoroughly reviewed to ensure the inclusion of key provisions such as:

- Performance expectations, as well as conditions for contract termination
- Provisions for adequate quality control and oversight concerning courseware
- Appropriate system reliability and emergency backup guarantees in technology service agreements
- Provisions for protecting student privacy and confidentiality
- Proper quality assurance mechanisms should be established for evaluating the qualifications and training of persons involved with direct contact with students, such as online tutoring or counseling.

Key issues to consider prior to signing any contract include:

- Has vendor response time been addressed and clearly defined?
- Is there a vendor/institution communication plan in place?
- Does this plan allow for open communication?
- Does the communication plan properly address personnel and problem escalation protocols?
- Is there a reporting mechanism in place for when problems arise, and does this address the timing of reporting?
- Are there adequate disaster recovery plans in place?

Managing Outsourced Services

The most common misconception is that the institution's role in the process disappears after a contract has been signed. On the contrary, the institution's role in the outsourcing process might initially increase. The accrediting organizations stress the importance of contractual obligations to provide a high-quality education to their students. This includes responsibility for quality assurance of outsourced services. As the *Best Practice* document states: "Although important elements of a program may be supplied by contractual partners or outsourced to other organizations, including contractors who may not be accredited, the responsibility for performance ultimately remains with the institution."

Internal management of vendor relationships is critical to the success of an outsourcing venture. Private businesses typically reserve approximately 5-10% of the cost of outsourcing the service for internal management of the project (McCord, 2002). An adequate percentage of knowledgeable, experienced IT staff should be maintained; their roles will change from performing the services to actively managing the services that are provided. Furthermore, no matter how experienced or successful a vendor, that vendor will require significant orientation to the institution's business processes. In essence, there should be a team of individuals that will maintain an ongoing relationship and communication with the vendor.

Once the services are operational, it is crucial that there be an open line of communication between vendor and institution. This is especially true if an outsourced service is mission critical. Outsourced servers are typically not backed up on campus, so even a small amount of "down time" can be detrimental to the institution. Institution administrators should be provided with a single point of contact within a vendor agency with whom they can communicate quickly and effectively.

Collaborative Approaches

> *Recommendation 8: Multiple institutions should seek to collaborate with one another, in consortial or similar arrangements, to offer services and achieve economies of scale wherever possible.*

Collaboration is an effective means of increasing the variety and sophistication of service offerings for students as well as achieving economies of scale. Student services might best be delivered on a collaborative basis to maximize available services, reduce duplication, and minimize costs for each participating institution. Current technology allows for aggregation to such a large scale that collaboration can be a win-win situation for states, students, and institutions alike. As institutions increasingly work together to form system-wide contracts for technology platforms and service providers, they should also consider the formation of a single consortia to provide a set of student support services that would be available to all students in the state, system, or consortium. States have already discovered the importance of systemwide utilities and have moved to develop centralized course platforms, service agreements, and support services such as call centers. Likewise, student services must be central to educational planning and treated as a statewide or regional utility for the benefit of all students. While the previous discussion and recommendations have been geared to institutions, it is ultimately recommended that state systems work together first on a statewide, and then on a regional basis to develop a set of collaborative services for all students in the state and region. Regional resources that are available to all students can help to raise the quality and level of education in the South as a whole.

State Collaboration

Within a state, effective collaboration among different institutions is essential in many ways; it can save time, resources, and costs. The most basic type of collaboration is simply the sharing of information that creates a body of knowledge among several institutions. Another type of collaboration involves the sharing of resources such as institutionally developed software solutions for support services. Colleges and universities may collectively review and license services agreements with service providers, resulting in significant cost savings. Or the state may develop or license a product to benefit all institutions in the state, creating even greater cost savings by the comprehensive nature of a single contract. The cost-effective nature of collaboration has important implications for student services because while institutions have made great investments in technical infrastructure and course development, they often do not recognize and adequately fund accompanying support services.

There are several good examples of collaborative efforts to provide student services on a state or system level.

University System of Georgia (USG). Within the USG, 34 participating institutions have collaborated to develop "eCore," an online program in which the first two years of a college curriculum are available totally at a distance (see www.georgiaglobe.org). A number of

parallel online support courses have been created to support online learning for all students, including: the Online Library Learning Center which teaches about how to use online resources, the Student Online Readiness Tool that helps students to determine how prepared they are for learning online, and Student Orientation that prepares students for interacting and learning online. The consortium also provides a centrally supported, extended-hours help desk for students as well as test proctoring, joint library cards, an online bookstore, and disability services. The USG is also working to develop statewide tutoring services and an online advising/counseling service.

Florida Community College Distance Learning Consortium. In Florida, the Florida Community College Distance Learning Consortium (http://www.distancelearn.org) prepares contracts of academic and support products for statewide implementation. These contracts are negotiated so that all colleges share in volume pricing despite the differences in size. Several student support functions are centrally funded and supported. The Community College Library Automation (CCLA) licenses digital content resources for the entire state so that all students have access to the same content wherever they attend college.
The state of Florida also supports the Florida Academic Counseling and Tracking for Students (FACTS) system (http://www.facts.org), which allows students to access their personal information such as an unofficial transcript or degree audit. Students can also prepare and submit their applications online. Since 1995, the state has invested approximately $28 million dollars into this project with an annual budget of $4.2 million. Because the price is too large for any one institution to bear, this system could only be developed with state funding.

Kentucky Virtual University. Kentucky Virtual University[11] (KYVU) strives to make postsecondary education more accessible, efficient, and responsive to Kentucky's citizens and businesses by coordinating and facilitating convenient online programs offered by the state's colleges and universities. KYVU has also partnered with the Kentucky Department for Adult Education and Literacy to help all adult learners improve their skills, achieve grade-level goals, and/or complete the GED by providing online literacy information, curriculum, resources, and adult education courses that are free to all Kentucky residents. Free statewide support services include:

- Call Center. Kentucky Virtual provides a call center that operates from 8 a.m. to 9 p.m. during the week and from 3 p.m. to 9 p.m. on Sundays. The call center offers advice on student orientation, registration, authentication, and Internet passwords; it provides guidance for students returning to college and details about online programs as well as help registering for a class and advice on transferring credit.

- Online Writing Center. The KYVU online writing center currently offers live tutoring and an essay center as well as online writing workshops.

[11] See http://www.kyvu.org

- Online Tutors. Staffed by trained teachers, the online tutorial services offer support in Math (basic through Calculus II), Accounting, Chemistry, Economics, Spanish, and Statistics.

- 24/7 Tech Support. The online help desk helps students log on to and use course tools on the KYVU Web site, access courses when an Internet connection is running slow or experiencing other delays, and solve technical problems. Students can also request a call or email from a technical assistance professional at a convenient time.

- Virtual Library. All Kentuckians who have a library card from a Kentucky library are eligible to use the Kentucky Virtual Library, which provides online catalogs and databases as well as full text articles and books held by Kentucky libraries, historical materials, a virtual reference desk, and databases of online resources for adult educators. The site also provides access to pertinent articles and databases for students and teachers in K-12 schools.

- Information Skills Tutorial. This tutorial is designed to help students locate, evaluate, and use information effectively. It helps students formulate research questions, develop effective research strategies, identify appropriate information sources, search electronic databases, evaluate the information, and use information responsibly and ethically.

- Career Planning. This site provides links to Web sites with information on various career fields, self-development and lifelong learning sources, and advice on searching for a job, including online job search sites.

Regional Collaboration

While state-level efforts to provide consortial student services have made great progress in decreasing costs and meeting student needs, a regional consortia may be an even more effective means of providing certain services that institutions or even a state may not be able to provide in an efficient, economical way. Indeed, collaboration on a regional level can expand the depth and breadth of services available to all students in the South. Regional cooperation makes education a regional asset, creating a win-win situation that can benefit students, institutions, and states. Collaborative services can increase institutional revenues and operating efficiency, while reducing expensive duplication of the same services.

SREB has a longstanding tradition of fostering collaboration on a regional basis in order to improve education. Its latest initiative, the American TelEd Communications Alliance (ATAlliance)[12], has the potential to assist the region in securing a variety of services. While the initial focus of the ATAlliance is on securing improved telecommunications services at lower prices through "cooperative" buying, the national alliance could extend beyond

[12] For a full description of the ATAlliance, please see http://www.atalliance.sreb.org/

purchasing and licensing to the area of collaborative programs and services. Some of the services described earlier can realistically be provided on a regional level via collaborative arrangements among several institutions across the member states to better serve students, colleges and universities, and participating states. SREB is encouraged to consider the potential of the ATAlliance in supporting this regional approach to services.

> *Recommendation 9: The Electronic Campus should develop greater capacity within its Web site to provide students with robust evaluative tools for comparing courses, programs, and institutional requirements.*

SREB's *Electronic Campus*. The *Electronic Campus* of the Southern Regional Education Board is an "electronic marketplace" of courses, programs, and services offered by accredited colleges and universities in the SREB states. The site is a "one-stop" point of entry for distance learning opportunities from the16 SREB states. Students have the option of choosing from more than 7,000 courses and 250 degree programs offered by 325 participating institutions.

In moving towards a student-centered model of service, the student should be provided with as much information as possible to make informed decisions. As noted in accompanying Distance Learning Policy Laboratory report, *The Challenges of Quality Assurance in a Distance Learning Environment*, the Pew Roundtable on Quality Assurance evaluated existing search engines for finding online courses on the Web. They noted several shortcomings, including the following:

- Listings by institution and course number instead of sorts by topic or program
- No differentiation regarding enrollment requirements (i.e. Does the student need to matriculate in the institution or a degree program in order to enroll?)
- No information on face-to-face and prerequisite requirements
- Poor description of who to contact for more information
- Insufficient information on course requirements
- No reporting of outcome measures (i.e. the typical drop, failure, or withdrawal rates)

Given the complex and confusing nature of fees and institutional requirements, students find it difficult to compare each course option prior to enrollment in order to find a course or program that meets their education and lifestyle needs. Students should be able to select a given course and compare, by matrix form, all relevant institutional policies such as tuition, fee structure, travel requirements, term length, etc. The *Electronic Campus* has moved forward to address several of the above issues. It currently provides several important services to students such as: the ability to sort output by course title, program name, or course description; an overview of the enrollment process at each participating institution; a listing of the on-campus attendance requirements for each course; and a contact person at each institution. Yet students cannot easily compare courses offered from different institutions in terms of typical withdrawal rates or differences in pricing structures. A mechanism that

could compare the attributes and requirements of each course or institution in a single table or Web page would better serve students in the region by allowing them to make more informed decisions prior to seeking enrollment at a particular institution.

> *Recommendation 10: SREB is encouraged to pursue its efforts to establish a regional "learning network" of support services to provide increased levels of service for students as well as financial benefits to states and institutions. The regional "gateway" should focus on those services that provide advantages that a single institution or state could not achieve on its own while "leveling the playing field" by sharing resources across the region.*

The subcommittee believes that SREB's plan to establish a "learning network for the South" through its Ways In™ initiative holds promise as a mechanism for sharing resources and services in an ASP model. As envisioned, the Ways In™ regional gateway would establish seamless links between existing or future electronic activities of states and colleges and universities in the South, a strategy that would allow investments to be leveraged in significant ways. The gateway could make it possible to greatly increase support services in the existing "electronic marketplace" created through the institutions that provide courses and programs through the *Electronic Campus*. This would be accomplished by establishing protocols and standards for an "open architecture" infrastructure at the regional level, permitting any state or institutional partner to easily link their existing distance learning or "virtual" campus to the regional gateway. States or colleges and universities could select those functions appropriate for their particular needs, adding services that they do not currently have online. For many institutions faced with decisions about how to develop or expand these services, how to build infrastructure, or how to secure staff and resources to add online services, the regional gateway could provide a cost-effective and proven alternative.

The proposed "gateway" would allow a prospective student to access information about all of the course and program offerings of SREB colleges and universities in the *Electronic Campus* and to execute a variety of services online from the gateway, e.g. financial services, advisement, admissions and registration, and credit review and evaluation. This student might, for example, register for three courses from different institutions at this single site rather than completing three separate registrations. This information would then be forwarded electronically to institutions with the regional "interface" ensuring its transferability and compatibility with their existing information systems. Various application processes, from admission to financial aid, could be handled in a similar way. Students could seek tutorial assistance, register to take a standardized test online, secure a study guide, or enroll in a non-credit course—all from one site, with links to SREB colleges and universities and other selected service providers.

The set of "priority service functions" that have been suggested appear to have potential to handle certain functions on a regional basis and can provide real added value to participating colleges and universities, states, and particularly students. Each service could be developed in concert with SREB states and integrated with current state initiatives. These include:

- learning bank™ – a regional electronic repository for student academic records of both credit and non-credit experiences, industry certifications, and related learning records
- learning passport™ – permits qualified students to enroll in courses from participating colleges and universities by streamlining the admissions process
- learning inventory™ – an online credit and degree audit evaluation and comparison system to provide students with tools to assess learning options
- learning coach™ – an online assessment tool that can be used to evaluate a broad range of skills and knowledge and then "coach" or direct learners to learning options to meet skill needs
- learning guide™ – intelligent agent to provide personalized orientation for new or returning students seeking online learning from colleges and universities

The Ways In™ gateway might also provide an exceptional "test bed" opportunity for pilot projects to help to establish protocols necessary to create a regional approach for student services for distance learners, to reduce costs through sharing, to reduce redundancy, and to fill "gaps" and fully integrate existing state efforts. Further, SREB's role in promoting and establishing necessary polices and procedures for such a regional effort will be critical to its success.

Regional Library Initiative

> *Recommendation 11: SREB and its member states should work with the Southeastern Library Network (SOLINET) to assess the feasibility of creating a virtual regional library network that would link the various state library initiatives together through a common Web portal.*

In order to create equal access for citizens of the Southern states, several states have created "virtual" libraries such as the Kentucky Virtual Library, Mississippi's Electronic Libraries Online, and Georgia Library Learning Online (GALILEO). These statewide efforts provide a Web interface to hundreds of databases indexing thousands of periodicals and scholarly journals among interconnected libraries across the state through a common "gateway." Since they use Web-based technology, the libraries can be accessed from any computer that has access to the Internet.

The services typically provided by virtual libraries include: electronic databases, online library catalogs, virtual reference service, digitized local collections, online interlibrary loan, courier service, and information literacy tutorials. The goal is to deliver more information to citizens and students by removing the barriers of time, geography, and social-economic level.

These statewide efforts are each commendable in their own right, yet a regional library initiative linking the various state efforts together could strengthen the services provided and fill in "gaps" around the region for states that do not have access to certain unique content or service areas. For example, a regional library could make uncommon materials held by one state available to all citizens in the South. SOLINET has been working with libraries in creating the *History of the South* initiative by constructing a portal for digitized collections housed in the region; several other regional services have already been developed, and could lay the foundation upon which a broader regional consortium could be developed (See Appendix B). Sharing costs across several partner states would also help leverage resources and to subsidize small libraries.

Concluding Comments

The efforts by states, colleges and universities, and SREB during the past five years to develop and expand online learning programs that increase access to learning for all citizens are exemplary. Many of these initiatives are nationally recognized and demonstrate the commitment to learning as a "lifelong" endeavor. Access to education will ensure the continued development and growth of the South's greatest asset—its people.

We applaud the expansion in the number of high quality courses and programs now available online, as well as the creative infrastructure provided by state or system-wide "virtual institutions." Colleges and universities have also made a strong commitment to challenge their faculty to think differently about the "packaging" and delivery of instruction and curriculum. At the same time, we challenge policy leaders to pursue efforts to improve upon student services such as those outlined in this report. Student services are integral to a quality and full learning experience. Education providers need to ensure that student support services are appropriate to new learning environments and that they are developed and supported to the fullest extent possible. This commitment will help to ensure greater access and retention in higher education as well as a higher return on the investments states have made in distance learning.

Distance learning places extraordinary demands on the individual student's own self-motivation and dedication to learning. Student support is crucial to success in this non-campus environment due to the isolation of many distance learning students from both formal and informal campus support structures. We challenge policymakers and higher education leadership to think differently about how learning is supported and to commit additional resources for learners in this unique educational environment. Services that can be accessed anytime and from anyplace, furthermore, will better serve all students.

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Appendix A

Student Services Survey Results

Table 1: Importance Ratings for Student Survey Respondents

	N	Minimum	Maximum	Mean	Std. Deviation
1. Registration	201	1	3	1.38	.661
2. Admissions	223	1	3	1.48	.690
3. Transfer articulation of credits	187	1	3	1.55	.742
4. Technical Support	195	1	3	1.55	.769
5. Tuition and fee payment	198	1	3	1.57	.779
6. Library Services	200	1	3	1.64	.787
7. Transcript	189	1	3	1.66	.741
8. Academic Advisement	220	1	3	1.70	.782
9. Financial Aid	203	1	3	1.73	.833
10. Bookstore	217	1	3	1.82	.820
11. Distance Learning Coaching	205	1	3	1.85	.847
12. Degree Audit	186	1	3	2.03	.802
13. Disability Services	183	1	3	2.08	.883
14. Pre-enrollment hardware assessment	181	1	3	2.15	.827
15. Career Services	212	1	3	2.17	.854
16. Pre-enrollment computer skill assessment	194	1	3	2.18	.827
17. Placement Testing	183	1	3	2.24	.823
18. Health and Counseling Services	187	1	3	2.37	.835

Table 2: Importance Ratings for Administration/Staff Respondents[13]

	N	Minimum	Maximum	Mean	Std. Deviation
1. Registration	86	1	3	1.06	.281
2. Admissions	88	1	3	1.10	.373
3. Library services	86	1	3	1.13	.369
4. Tuition and fee payment	87	1	2	1.14	.347
5. Academic Advisement	88	1	3	1.16	.398
6. Bookstore	87	1	3	1.31	.513
7. Disability services	84	1	3	1.35	.570
8. Transcript	84	1	3	1.38	.579
9. Technical support	85	1	3	1.42	.661
10. Transfer/articulation of credits	85	1	3	1.55	.627
11. Placement testing	82	1	3	1.62	.796
12. Degree audit	81	1	3	1.68	.739
13. Career Advisement	86	1	3	1.98	.703
14. Distance Learning Coaching	82	1	3	2.21	.733
15. Pre-enrollment hardware assessment	81	1	3	2.23	.746
16. Pre-enrollment computer skill assessment	85	1	3	2.25	.738

[13] The administrative version of the survey did not include ratings of Financial Aid or Health and Counseling services

Appendix B

State Virtual Libraries in the SREB region

Alabama Virtual Library — http://www.avl.lib.al.us/about/

Arkansas Digital Library — http://www.uark.edu/libinfo/diglib/index.html

Florida Distance Learning Library Initiative — http://dlis.dos.state.fl.us/dlli/

Florida Center for College Library Automation (CCLA) — www.ccla.lib.fl.us

Georgia Library Learning Online (GALILEO) — http://www.galileo.peachnet.edu/

Kentucky Virtual Library — http://www.kyvl.org

Louisiana Online University Information System (LOUIS) — http://www.lsu.edu/ocs/louis

Louisiana Library Connection — www.state.lib.la.us

Maryland Digital Library — http://md-diglib.org/

Mississippi Alliance for Gaining New Opportunities Through Library Information Access (MAGNOLIA) — http://www.lib.usm.edu/~magnolia/home.html

Mississippi Electronic Libraries On-line (MELO) — http://www.colin.cc.ms.us/vcclib/

North Carolina Libraries for Virtual Education (NC LIVE) — http://www.nclive.org/

Oklahoma Library Technology Network — http://www.odl.state.ok.us/oltn/gateway.htm

South Carolina Virtual Library — Digital Information for South Carolina Users (DISCUS) http://www.state.sc.us/scsl/discus/

Tennessee Electronic Library — http://www.state.tn.us/sos/statelib/tel/index.htm

TexShare — http://www.texshare.edu

Virtual Library of Virginia (VIVA) — http://www.viva.lib.va.us/

Virginia Library and Information Network (VLIN) — www.lva.lib.va.us

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